

In claim 3, line 1, delete the word "substantially".

In claim 7, line 4, delete the word "substantially".

8. (amended) A process for making a coated article, comprising the steps of:

providing a temperature-sensitive substrate having a melting point lower than glass and a surface for receiving an anti-reflection coating; *substrate*

C1
Sub 7
Q2 depositing an anti-reflection coating including a plurality of layers substantially transparent to visible light on said surface, said depositing step including the steps of reactively sputtering at least two layers of high refractive index material selected from the group consisting of tin oxide, indium oxide, zinc oxide, tin-doped, indium oxide, antimony-doped tin oxide, tin-bismuth oxide, and tin-zinc oxide, and having an index of refraction between approximately 1.9 and 2.2; and

depositing at least one [other anti-reflection coating] layer of a low refractive index material having a refractive index lower than said [DC reactively sputtered] high refractive index material.

9. (amended) An anti-reflection coating for a substrate, comprising:

C2 four layers substantially transparent to visible light and designated the first, second, third, and fourth layers in consecutive numerical order beginning with the layer farthest from the substrate;

said first layer [substantially] composed of silicon dioxide having a refractive index lower than said substrate, and optical thickness of about one-quarter wavelength at a wavelength between 480 and 560 nanometers; and a physical thickness of about 94.2 nanometers;

said second layer [substantially] composed of [DC reactively sputtered], tin oxide having a

refractive index higher than said substrate, an optical thickness between about one-quarter and one third of a wavelength at a wavelength between 480 and 560 nanometers, and a physical thickness of about 76.4 nanometers;

C2
said third layer substantially composed of silicon dioxide having a refractive index lower than said second layer and a physical thickness of about 31.9 nanometers;

and
said fourth layer substantially composed of tin oxide having a refractive index greater than said third layer and a physical thickness of about 20.3 nanometers; and

said third and fourth layers having a total optical thickness less than one-quarter wavelength at a wavelength between 480 and 560 nanometers.

— In claim 10, lines 4, 7, 11, 13, delete the word “substantially”.

// In claim 13, line 1, delete the word “substantially”.

// In claim 17, line 4, delete the word “substantially”.

33. (amended) An article comprising:

C3
(a) a temperature-sensitive substrate having a melting point lower than glass; and

(b) an anti-reflection coating comprising a plurality of layers substantially transparent to visible light, wherein;

(1) a first layer and a third layer are [substantially] composed of silicon dioxide; and

(2) a second layer and a fourth layer have refractive indices between approximately

1.9 and 2.2, and wherein [the] one of said second and fourth layers [are each substantially] is

C3
Cand
composed of and selected from the group consisting of tin oxide, indium oxide, zinc oxide, tin-doped indium oxide, antimony-doped tin oxide, tin-bismuth oxide, and tin-zinc oxide and the other of said second and fourth is composed of and selected from the group consisting of tin oxide, indium oxide, zinc oxide, antimony-doped tin oxide, tin-bismuth oxide, and tin-zinc oxide.

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In claim 38, lines 4, 7, 9 and 12, delete the word "substantially".

In claim 39, lines 2, 4, 6 and 9, delete the word "substantially".

C4
40. (twice amended) A method for providing an anti-reflection coating to a substantially plastic substrate, wherein the coating comprises a first, second, third and fourth layers in consecutive numerical order with the first layer being farthest from the substrate, wherein each layer is substantially transparent to visible light, comprising:

depositing the first and third layers by reactive sputtering, wherein the first layer is [substantially] composed of silicon dioxide; and

depositing the second and fourth layers by reactive sputtering, wherein the second and fourth layers have an index of refraction between approximately 1.9 and 2.2 and wherein one of said second and fourth layers is [are each substantially] composed of and selected from the group consisting of tin oxide, indium oxide, zinc oxide, tin-doped indium oxide, antimony-doped tin oxide, tin-bismuth oxide, and tin-zinc oxide and the other of said second and fourth layers is composed of and selected from the group consisting of tin oxide, indium oxide, zinc oxide, antimony-doped tin oxide, tin-bismuth oxide, and tin-zinc oxide.

43. (twice amended) An anti-reflection coating for a plastic substrate comprising:

a plastic substrate and a coating wherein said coating includes,

C5
Sub E6
four layers ¹¹²substantially transparent to visible light designated first, second, third and fourth layers in consecutive numerical order beginning with the layer farther from the substrate, said first and third layers comprised of silicon dioxide and said second and fourth layers having a refractive index higher than said substrate and between 1.9 and 2.2 and selected from the group consisting of tin oxide, indium oxide, zinc oxide, tin-doped indium oxide, antimony-doped tin oxide, tin-bismuth oxide and tin-zinc oxide; and

said second layer having an optical thickness no greater than about one third of a wavelength at a wavelength of about 480 to 560 nanometers.

160-186 nm
=> 148 -> 171
Yes between 1/3 to 1/2 λ

47. (twice amended) A Rock system anti-reflection coating for a plastic substrate comprising a plastic substrate and said coating wherein the second and fourth layers are [substantially] composed of material with a refractive index of 1.9 to 2.2 and selected from the group consisting of tin oxide, indium oxide, tin-doped indium oxide, tin-bismuth oxide and tin-zinc oxide, and wherein the first layer is [substantially] composed of silicon dioxide.

E
C6
5372874

Add the following new claims:

49. An antireflective coating for a plastic substrate consisting essentially of:

a plurality of high refractive index material layers substantially transparent to visible light, having a refractive index between 1.9 and 2.2 and selected from the group consisting of tin oxide, indium oxide, zinc oxide, tin-doped indium oxide, antimony-doped tin oxide, tin-bismuth oxide and tin-zinc oxide; and

at least one low refractive index material layer having a refractive index material layer lower than each of said plurality of high refractive index material layers wherein one of said at least one low refractive index material layers is disposed between adjacent ones of said plurality of high refractive index material layers.

50. An antireflection coating for a plastic substrate comprising:

a plurality of high refractive index material layers substantially transparent to visible light having a refractive index higher than said substrate and between 1.9 and 2.2 and selected from the group consisting of tin oxide, indium oxide, zinc oxide, tin-doped indium oxide, tin-bismuth oxide and tin-zinc oxide; and

at least one low refractive index material layer having a refractive index lower than said substrate wherein one of said high refractive index material layers is closer to said substrate than said at least one other layer and said at least one low refractive index material layer and said at least one other layer are adjacent to one another.

51. The antireflective coating of claim 50 wherein said plurality of high refractive index material layers includes first and second high refractive index material layers with said at least one low refractive index material layer positioned therebetween.

52. The antireflection coating of claim 51 wherein one of said first and second high refractive index material layers is composed of the group consisting of tin oxide, indium oxide, zinc oxide, antimony-doped tin oxide, tin-bismuth oxide, and tin-zinc oxide.

53. The antireflection coating of claim 47 wherein one of said second and fourth layers is composed of materials selected from the group consisting of tin oxide, indium oxide, zinc oxide, antimony-doped tin oxide, tin-bismuth oxide, and tin-zinc oxide.